

**FINDING OF NO SIGNIFICANT IMPACT
and
NOTICE OF PROPOSED DECISION
for the
BIG SHEEP CREEK WATERSHED ENVIRONMENTAL ASSESSMENT
DOI-BLM-MT-B050-2016-0009-EA**

Introduction and Background

In 2015, a Bureau of Land Management (BLM) interdisciplinary team (IDT) assessed BLM-administered lands within the Big Sheep Creek Watershed (BSCW) to determine whether the five Western Montana Land Health Standards were being met. Those standards include: Upland, Riparian and Wetland Areas, Water Quality, Air Quality, and Biodiversity. The assessment covered uplands, riparian/wetland areas, and forested habitats and was conducted in accordance with the 4180 Land Health Standards Manual. The Assessment Report was completed and released to the public in December 2015.

Following the Assessment, the BLM completed the Big Sheep Creek Watershed Environmental Assessment (DOI-BLM-MT-B050-2016-0009-EA) (EA) which analyzed and disclosed environmental impacts of implementing up to four different management alternatives on BLM administered land in the BSCW. The EA included management alternatives to address two key issues: Riparian, Wetland and Aquatic Habitat and Upland and Sagebrush Steppe Habitat. Additional resource concerns identified included; Recreation and Travel Management, Special Status Species Habitat, Noxious and Invasive Species, Cultural and Paleontological Resources, Socioeconomics, Forest and Woodland Habitat, Visual Resource Management and Wilderness Characteristics.

Management alternatives are aimed at improving land health and enhancing biodiversity. The action alternatives analyzed in the EA were developed by the BLM in consultation with the grazing permittees, local landowners, conservation groups, state agencies, and other federal agencies. Additional information is available in the BSCW Assessment Report and the BSCW EA which are available at the Dillon Field Office or on the Internet at http://www.blm.gov/mt/st/en/fo/dillon/field_office.html.

Finding of No Significant Impact (FONSI)

I have reviewed the Big Sheep Creek Watershed EA (DOI-BLM-MT-B050-2016-0009-EA), including the explanation and resolution of any potentially significant environmental impacts, and reviewed and thoroughly considered public comments regarding the EA. I have reviewed the Council of Environmental Quality (CEQ) regulations at 40 CFR 1508.27 which define significance and found the actions analyzed in the Big Sheep Creek Watershed Environmental Assessment DOI-BLM-MT-B050-2016-0009-EA do not constitute a major Federal action that will significantly affect the quality of the human environment. Therefore an Environmental Impact Statement (EIS) will not be prepared.

The definition of significance includes both “context” and “intensity.” These ten significance criteria are all related to “intensity.”

- (1) Impacts that may be both beneficial and/or adverse.
- (2) The degree to which the proposed action affects public health or safety.
- (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- (4) The degree to which the effects on the quality or the human environment are likely to be highly controversial.
- (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.
- (8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed, or eligible for listing, in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
- (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- (10) Whether the action threatens a violation of Federal, state, or local law or requirements imposed for the protection of the environment.

This document is adequate and in conformance with the Dillon Resource Management Plan (RMP) as amended as required by 43 CFR 4100.0-8.

Dillon Field Manager

Date

Proposed Decision

Therefore, **it is my Proposed Decision** to implement Alternative B with the exception of Non-Commercial Mechanical/Prescribed Fire. For Non-commercial mechanical/prescribed fire, I have decided to implement Alternative C. I have also decided to implement the Features Common to All Action Alternatives listed in the Big Sheep Creek EA. These actions are further described below with the associated projects/programs.

The actions included in this Proposed Decision are described more specifically below, and in the BSCW EA (DOI-BLM-MT-B050-2016-0009-EA). Please refer to the maps provided in the BSCW EA for further management and project clarification.



Big Sheep Creek Watershed – July 2015

Livestock Management and Structural Projects:

I have decided to renew Term Grazing Permits for a ten-year period on the ten allotments that were determined to be meeting Land Health Standards, needed no changes to facilitate improved livestock management, or on which current livestock grazing management was not determined to be a causal factor for the failure to meet Land Health Standards. These allotments will continue

to be managed as described under Alternative A with the Terms and Conditions shown below added.

These allotments include:

- Alkali Creek #30024
- Cabin Creek #20704
- Cottonwood #30638
- Four Eyes #30269
- Four Eyes Isolated #20612
- Nicholia #10699
- North Dixon #30602
- Rock Creek Seeding #20041
- Simpson Creek #20158
- Whitworth #20720

I have decided to implement Alternative B for the Crystal Creek #30102, Dixon Mountain #30022, Indian Creek #10741, Indian Creek Isolated #30653, Junction #20009, Meadow Creek #20042, Meadow Creek Isolated #30611 and Rio Puerco #10700 allotments. Although these eight allotments met the five Rangeland Health Standards, there were site specific concerns, administrative changes, changes in season of use and/or structural or vegetative projects that were analyzed in the Big Sheep Creek EA. Some of these changes were requested by the permittee. To address livestock induced resource concerns on the following four grazing allotments and an additional pasture within a fifth allotment, I have decided to implement Alternative B.

- Pine Creek #30001
- Porcupine Canyon #20107
- Simpson Creek FS #30207
- Rock Creek Isolated #20698
- Contours Pasture – Muddy Creek #30039

The term grazing permits for these thirteen allotments will be modified and issued for a period of ten years with new terms and conditions and/or range improvement (structural and/or vegetative) projects to address administrative changes or identified concerns.

The unallotted parcels within the Big Sheep Creek Watershed will continue to be managed as unavailable for livestock grazing.

Terms and Conditions:

In addition to the Terms and Conditions outlined below under individual allotments, the following terms and conditions will be added to all new livestock grazing permits:

- Use on the (allotment name) Allotment(s) will be in accordance with the Proposed Decision for the Big Sheep Creek Watershed EA# DOI-BLM-MT-B050-2016-0009-EA.
- Term Grazing Permits will be amended to state that depredation losses from wolves may occur.
- With prior approval, flexibility will be authorized for the season of use on each allotment if

annual weather conditions and forage production warrant. The season of use begin and end dates may be adjusted up to seven days earlier or later than specified on the permit due to yearly variations in weather affecting forage production. Livestock may need to be removed from a specific pasture prior to the maximum number of days specified in the grazing schedule. If this occurs, the time allocated in subsequent pastures will be adjusted proportionally. Conversely, if annual production is unusually high, livestock may be allowed to remain in a given pasture for up to five additional days and the remainder of the rotation schedule adjusted accordingly.

- After consultation with the BLM, and written approval, the planned pasture grazing sequence (e.g. pasture rested) and/or season of use may be adjusted on a short term basis due to drought or other unforeseen natural events (e.g. flooding, wildfire). Authorized AUMs will not be exceeded by allowing this flexibility.
- With prior approval, more livestock may be grazed for a shorter period within the authorized season of use. However, the maximum authorized AUMs, as specified in the Term Grazing Permits cannot be exceeded by allowing this flexibility.
- Permittees or lessees shall provide reasonable administrative access across private and leased lands to the Bureau of Land Management for the orderly management and protection of the public lands.
- Annual utilization thresholds on cool season bunch grasses will be 50% (to maintain plant health/vigor and leave adequate residual cover for sage grouse) OR when livestock use on sedges averages four inches along the greenline (to prevent excessive trailing along streams) on non-fisheries or non-native fisheries streams and six inches on WCT streams, whichever occurs first. These thresholds will be added to the terms and conditions of the term grazing permits, and will be applicable to all allotments included in the BSCW as a tool to determine moves between pastures and/or off the allotment, and in conjunction with long term trend data to determine management effectiveness. For example, when a threshold is met, livestock will be moved to the next pasture or off of the allotment.

Administrative Actions:

AUMs reduced from current active use will be held in suspended non-use on the revised Term Grazing Permits.

Distribution:

The BLM encourages, and if warranted, will require use of temporary electric fence, livestock supplement (e.g., salt, protein block) placement, riding, and herding as a means of improving livestock distribution in all alternatives. When used, livestock supplement shall be placed on ridges or terraces at least ¼ mile from the nearest livestock water source. Supplement will be placed in existing disturbed areas to reduce impacts to sage grouse habitat.

Drought

During drought years when forage production is considerably reduced, the Dillon Field Office will follow the BLM drought policy Titled “Bureau of Land Management, Policy for Administering Public Land Grazing in Montana, North and South Dakota During Periods of Drought and the BLM’s National Drought Policy which is outlined in Washington Office Instruction Memorandum 2013-094.

Water Developments

-All applicable State and Federal Permits will be obtained and the terms and conditions applied. Spring sources and associated riparian wetland habitat will be fenced to exclude livestock use on developed springs.

-Flow measurements will be gathered at springs proposed for new development. Springs that have inadequate flows to provide a reliable water source for authorized livestock, while maintaining wetland/riparian habitat, will not be developed. Adequate water will be left at the spring source to maintain wetland hydrology, hydric soils, and hydric vegetation.

-New spring developments in sage grouse habitat will be designed to maintain or enhance the free flowing characteristics of springs and wet meadows. Modify developed springs, seeps and associated pipelines to maintain predevelopment riparian areas within sage grouse habitat where necessary (USDI, 2015a, Appendix C).

-No new roads will be authorized as a result of water developments. Permit holders may be authorized to travel along pipeline routes to perform maintenance as defined in the term grazing permit.

-All old materials (pipeline, troughs, head boxes, etc.) will be cleaned up and removed when springs are re-developed, maintained or abandoned.

-Any proposed pipelines and water troughs will be located in existing disturbed areas or unsuitable sage grouse habitat to the extent practical.

-Design features to mitigate potential for West Nile Virus will be incorporated into new and existing water developments (USDI, 2015a, Appendix C).

-Soil disturbance resulting from pipeline installation will be seeded with a native seed mix during the fall, following construction.

-State of Montana Water Right laws and administrative procedures will be followed in applications for Water Rights on Public Land. The BLM will limit maximum flow rates to 35 gallons per minute or less and maximum volumes to 10 acre-feet or less for new developments. The BLM will submit proposed changes to Montana DNRC and comply with Public Notice requirements for changes to existing water rights. Approvals will be obtained prior to construction where additional stock tanks resulting in new points of use are to be added to existing systems and changes to existing water right claims will occur. Applications for new water rights will be after construction in most cases. The BLM is committed to respect water rights of all parties and will not knowingly infringe on other water rights holders.

Fences

- Any new or replacement boundary fences will normally be a four-wire fence and any new interior (pasture) fences will normally consist of three wires, constructed in conformance with BLM Fencing Handbook H-1741-1.

- All old materials (wire, steel and wood posts, etc.) will be cleaned up and removed when fences are re-built, maintained or abandoned.

- High tensile electric fences will be considered in areas where they may provide an effective alternative to traditional barbed wire construction. These will also be constructed in conformance with BLM Fencing Handbook H-1741-1.

- Avoid building new wire fences within 2 km of occupied leks. If this is not feasible, ensure that high risk segments are marked to avoid collisions (USDI, 2015a, Appendix C).

- New fence construction that is determined to be in a high use area for sage grouse (i.e. fences

within ¼ mile of a lek and/or winter concentration areas; considering topography, vegetation, visibility, etc.) will be marked with flight diverters to reduce collisions (USDA, 2012).

- Dysfunctional fences on public lands will be removed, modified and/or rebuilt. Existing BLM fences that impede wildlife movement will be modified or rebuilt to BLM specifications on a prioritized schedule.

Allotment-Specific Livestock Management and Range Improvement Structural Projects

The following section describes the allotment-specific livestock management changes and proposed rangeland improvement projects. The proposed projects are shown on individual Allotment Maps in Appendix A of the BSCW EA (available at the Dillon Field Office or on the Internet at http://www.blm.gov/mt/st/en/fo/dillon_field_office.html.)

Crystal Creek #30102 (map #1)

Grazing Administration and Management:

- AUMs will be adjusted from the current permitted AUMs of 343 to 240. The grazing rotation will remain the same rest rotation system. Each pasture will be rested one in three years.

Dixon Mountain #30022 (map #2)

Grazing Administration and Management:

- The spring grazing period will be lengthened to provide more flexibility for the permittee. It will change from 5/5 – 6/5 to 5/1 – 7/1 Spring use will not exceed 30 days within the new grazing period. Fall grazing use will remain 30 days within the grazing period of 11/1 – 12/31.
- Early, late, rest rotation will continue on this allotment.
- Adjust the allotment boundary to reflect the actual boundary on the ground.

Projects:

- Harden existing water gap with rock and install sediment traps in pasture #3 on Big Sheep Creek reach #108.
- Stabilize streambank on Big Sheep Creek along the Deadman Gulch Campground access road as further described under the heading *Riparian, Wetland and Aquatic Habitat* on pages 18 – 20 of this Proposed Decision.

Table 1: Proposed Authorized Use for Dixon Mountain Allotment, Alternative B

	PASTURE #1 (&2)	PASTURE #3 (&2)	PASTURE #4
2017	11/1 – 12/31 (30 days)	REST	5/1 – 7/1 (30 days)
2018	REST	5/1 – 7/1 (30 days)	11/1 – 12/31 (30 days)
2019	5/1 -7/1 (30 days)	11/1 – 12/31 (30 days)	REST
2020	REPEAT		

Indian Creek #10741(map #3)

Grazing Administration and Management:

- Grazing period will change from 6/15 – 10/15 to 7/1 – 10/31 and the authorized AUMs for this allotment will remain the same at 509.
- Each pasture will continue to be rested every fourth year.
- Simpson Creek pasture will not be grazed during WCT spawning/egg incubation period of July1 – August 1.

Projects:

- Install a culvert at road crossing on Indian Creek (Riparian Reach #127; Map 3). For further description see the heading *Stream Crossings* in the *Recreation and Travel Management Section* on page 21 of this Proposed Decision.
- Remove approximately 0.5 miles of dysfunctional sheep fence that at one time separated the Sawlog pasture of Indian Creek allotment from Indian Creek Isolated allotment and combine that portion of Indian Creek Isolated with the Sawlog pasture. A portion of the existing fence between BLM and private may need be modified and/or improved to keep cattle in the Indian Creek allotment.
- Remove the Cutthroat Exclosure, approximately 0.3 miles of fence, now that the vegetation and stream channel inside of the exclosure matches the outside.

Table 2: Proposed Authorized Use for Indian Creek Allotment, Alternative B

	SIMPSON CREEK	INDIAN CREEK RIPARIAN (10 days)	ELK TRACK	SAWLOG
YEAR 1	REST	7/1 – 7/10	7/11 – 8/14	8/15 – 9/13
YEAR 2	9/4 – 10/8	REST	7/1 – 8/4	8/5 – 9/3
YEAR 3	8/10 – 9/13	7/31 – 8/9	REST	7/1 – 7/30
YEAR 4	8/16 – 9/19	8/5 – 8/15	7/1 – 8/4	REST
YEAR 5	REPEAT			

Indian Creek Isolated #30653 (map #3)

Grazing Administration and Management:

- Combine the northwest portion of this isolated allotment with the Indian Creek allotment.

Projects:

- Remove dysfunctional sheep fence that at one time separated the Sawlog pasture of Indian Creek allotment from Indian Creek Isolated allotment and combine that portion of Indian Creek Isolated with the Sawlog pasture. A portion of the existing fence between BLM and private may need be modified and/or improved to keep cattle in the Indian Creek allotment.

Junction #20009 (map #4)

Projects:

- Up to 100 acres of wetland restoration on Tex Meadow (Riparian Reach #1447). Please see description under the heading *Riparian, Wetland and Aquatic Habitat* on pages 17 – 18 of this Proposed Decision. Up to 10 acres of riparian wetland restoration adjacent to Lower Cabin Creek (Riparian Reach #179). Please see description under the heading *Riparian, Wetland and Aquatic Habitat* on pages 18 – 20 of this Proposed Decision.

Meadow Creek AMP #20042 (map #9)

Grazing Administration and Management:

- The Meadow Creek Isolated allotment will be combined with the Meadow Creek AMP. This will combine the AUMs which will then change the Meadow Creek AMP AUMs from 191 to 230. The number of livestock permitted will change from 103 cattle to 110 cattle. The total BLM acres will be combined changing the Meadow Creek AMP from 1149 to 1309 BLM acres.
- The Meadow Creek AMP allotment boundary will be adjusted.

Projects:

- Approximately 1.2 miles of fence will be removed between the Meadow Creek AMP and Meadow Creek Isolated allotments.

Meadow Creek Isolated #30611 (map #9)

Grazing Administration and Management:

- This allotment will be eliminated because this allotment will be combined with the Meadow Creek AMP.

Projects:

- Approximately 1.2 miles of fence will be removed between the Meadow Creek AMP and Meadow Creek Isolated allotments.

Muddy Creek #30039 (map #5)

Grazing Administration and Management:

- Since the last time this allotment was assessed, Wilson pasture has been removed from the Muddy Creek allotment. The grazing system will not be changed from current use. The current rotation is outlined in Table 3 below for clarification.
- The grazing management will continue as a rest-rotation system allowing rest in each pasture every third year. The number of livestock authorized on this allotment will be up to 350 cow/calf pair and the grazing period will remain June 20 – October 15. The permitted AUMs will remain 1154.
- Little Water pasture will continue to be used for trailing cattle only. The trailing will consist of one day in the spring and one day in the fall.
- Upper and Lower Wet Meadow pastures are made up of mostly private land. For this reason, these pastures are not included in the rest rotation system but are utilized at the operator's discretion so long as resources are not adversely affected on BLM administered land within these two pastures.

Projects:

- Improve stream crossings. For further description see the heading *Stream Crossings* in the *Recreation and Travel Management Section* on page 21 of this Proposed Decision. A prioritized list will be created for extensive fence maintenance throughout the Muddy Creek allotment. This work will be the responsibility of the permittee.
- Build an approximately 0.2 mile exclosure fence around spring in section 11 of McNinch pasture to protect the source.
- Frequent riding will keep cattle pushed off of the small stream reach in the mostly private pasture known as the Lower Wet Meadow pasture.
- Redevelop Red Dirt Spring in the Hidden pasture. Install a new 1,000 gallon water trough and complete maintenance on the existing pipeline that runs into the Rio Puerco allotment supplying water to the Red Dirt pasture. Expand the existing spring exclosure to include a portion of the small spring brook. New exclosure fence will be approximately 0.2 miles of 4 four wire fence. The existing dysfunctional exclosure will be removed. Two new 1,000 gallon tanks will be installed to replace old rusted out troughs in the Red Dirt pasture of Rio Puerco allotment.
- Redevelop Willow Spring in the Timber Butte pasture. Install a new 1,000 gallon water trough.
- Abandon and clean-up Hidden Pasture Spring.

Contour pasture projects:

- Develop Lower Lou Gulch Spring on the south end of Contours pasture, T13SR10W Section 28, and construct a larger spring exclosure consisting of approximately 0.2 miles of 4-wire fence, which will incorporate the small wetland and spring brook #1421. A short pipeline, approximately 250 feet, will extend off the spring box to a 1,000 gallon watering trough. This pasture is rested every third year and grazed for only 9 days the other two years.
- Approximately 0.5 miles total of temporary fence will be constructed around wetlands #140 and #1414. Frequent riding will be required to keep cattle pushed out of the corner of the pasture and off of reaches #142 and #1411.
- Clean-up and abandon the dysfunctional Wyatt Spring. Removal of approximately 0.2 miles of old dysfunctional spring exclosure fence.
- Explore ideas to rehab the uplands that have been contour plowed and seeded with hard fescue. Small plots will be identified for use with hand tools to prepare the soil for seeding with native sage grouse preferred forbs and grasses.

Table 3: Proposed Authorized Use for Muddy Creek Allotment, Alternative B

	CONTOURS	MUDDY RIPARIAN	MUDDY BOTTOM	MCNINCH	TIMBER BUTTE	SOURDOUGH	HIDDEN
2017	REST	REST	6/20 – 7/26	7/27 – 8/9	REST	8/10 – 8/30	8/31 – 9/29
2018	6/20 – 6/29	6/30 – 7/6	7/7 – 8/9	8/10 – 8/23	8/24 – 9/25	REST	REST
2019	9/10 – 9/19	9/20 – 9/27	REST	REST	7/20 – 8/18	8/19 – 9/9	6/20 – 7/19
2020	REPEAT						

Pine Creek #30001 (map #7)

Grazing Administration and Management:

- Implement an early, late, rest grazing system.
- One out of every three years the BLM pasture will be rested.
- Permitted AUMs on the BLM pasture will stay the same in the spring, 225, but will change during the fall use from 182 to 122. A total reduction of 60 AUMs.
- On years where late season grazing is scheduled, 160 yearling cattle will graze this pasture.
- Late season use will be changed from 9/25 – 10/15 to 9/25 – 11/1 to provide more flexibility to the permittee. Grazing will be authorized for up to thirty days within this grazing period.

Projects:

- Up to 0.25 miles of new pipeline across BLM administered land off of the existing FS Pass Creek Spring development and a 1,000 gallon water trough will be installed on the Southeast corner of the BLM pasture to provide more reliable water and therefore better cattle disbursement in this pasture.
 - Up to 10 acres of wetland restoration on the wet meadow Nicholia (Riparian Reach #1440, Map 7). Please see description under the heading *Riparian, Wetland and Aquatic Habitat* on pages 17 – 18 of this Proposed Decision. Improve stream crossings at the following locations. Install culvert at the upstream end of Deadman Creek (Riparian Reach #123; Map 7) For further information see *Stream Crossings* in the *Recreation and Travel Management Section* on page 21 of this Proposed Decision.
 - Remove culvert on the downstream end of Pine Creek (Reach #126, Map 7) just upstream of its confluence with Deadman Creek.

Table 4: Proposed Authorized Use for Pine Creek Allotment, Alternative B

LIVESTOCK NUMBER	YEAR	GRAZING PERIOD	AUMs
342 160 Yearling (Fall)	1	REST	
	2	6/16 – 7/11	225
	3	9/25 – 11/1 (up to 30 days)	122
	4	REPEAT	

Porcupine Canyon #20107 (map #8)

Grazing Administration and Management:

- A new pasture will be created by building a fence that will separate the existing Porcupine Pasture. This fence will create the North Porcupine Riparian pasture of approximately 450 acres of BLM administered land and the South Porcupine pasture of approximately 350 acres of BLM administered land.
- Yearlong rest will be afforded the North Porcupine Riparian, South Porcupine, and the Island Butte pasture every third year.
- The newly created North Porcupine Riparian pasture will be grazed up to 14 days on the years it is not rested.
- Permitted kind of livestock will change from 112 cattle to 100 Yearling. Permitted AUMs will change from 247 to 181. Grazing period will change from 6/15 – 8/31 to 6/15 – 8/17.

Projects:

- Create North Porcupine Riparian pasture by building a new 3-wire 1.4 mile fence to divide the current Porcupine Pasture. Fence will be built so that existing water troughs can be accessed from both North Porcupine Riparian and South Porcupine pastures.
- If it is determined to be necessary an additional trough will be installed on the Island Butte spring for an additional water source.
- Construct an exclosure fence around wetland #1460 and spring brook #746. This will consist of approximately 1.25 miles of new 4-wire fence and enclose approximately 25 acres.
- Consider installing a water gap in the new South Porcupine pasture if determined that existing water troughs are not sufficient. This water gap would be on Cabin Creek on private land and it would only be implemented if needed and with landowner consent.
- Up to 6 acres of wetland restoration on Island Butte Wetland (Wetland #1460, Map 8). Please see description under the heading *Riparian, Wetland and Aquatic Habitat* on pages 17 – 18 of this Proposed Decision. Remove old dysfunctional culvert at the bottom of Island Butte Spring (Reach #746).
- Install culvert on the road crossing over Porcupine Creek (between Reach #159 and Reach #161, Map 8). For further description see the heading *Stream Crossings* in the *Recreation and Travel Management Section* on page 21 of this Proposed Decision.

Table 5: Proposed Authorized Use in the Porcupine Canyon Allotment, Alternatives B

	NORTH PORCUPINE RIPARIAN	SOUTH PORCUPINE	ISLAND BUTTE	CORRAL
YEAR 1	REST	6/15 – 7/12	7/13 – 7/27	7/28 – 8/17
YEAR 2	6/15 – 6/28	6/29 – 7/27	REST	7/28 – 8/17
YEAR 3	7/21 – 8/3	REST	7/6 – 7/20	6/15 – 7/5
YEAR 4	REPEAT			

Rio Puerco #10700 (map #10)

Grazing Administration and Management:

- Grazing season will be changed from 9/15 – 12/15 to 7/1 – 10/1
- Implement a deferred grazing rotation. One year cattle will be turned out on the south end of the Muddy Creek pasture and by riding will be kept to this end for thirty days, and then pushed to the north end and held their by riding for another thirty days. The Red Dirt pasture will be a part of this deferred rotation. See table 6 below
- Increase number of permitted livestock from 82 cattle to 100 cattle
- Increase permitted AUMs to 275. This will reinstate 53 of the suspended AUMs.
- Change type of livestock in the Shearing Pen pasture from horses to cattle. Permitted AUMs will remain 32. Grazing period will be changed from 5/1 – 12/31 to 7/1 – 10/1 and may be grazed for up to 20 days within this grazing period.
- If water is found in the Shearing Pen pasture, this pasture will create flexibility to rest one of the other three pastures, if needed for drought, etc.

Projects:

- Extend enclosure around reach # 149 to enclose reach #1491. This enclosure will meet up with private boundary fence and will consist of approximately 0.2 miles of additional 4-wire fence. A hardened water gap will be built in to continue to allow cattle to access water.
- Install up to 1.5 miles of temporary electric fence to divide the west side of the allotment into two separate pastures.
- If feasible drill and facilitate a well on the south end of the Shearing Pen pasture.
- If feasible permittee will redevelop spring on the Northwest corner of the allotment in Rock Canyon. No new fence will be needed. Up to 300 feet of pipeline will be reinstalled along with a new spring box and 1,000 gallon watering trough.

Table 6: Proposed Authorized Use in the Rio Puerco Allotment, Alternatives B

MUDDY CREEK (SOUTH)		MUDDY CREEK (NORTH)	RED DIRT
YEAR 1	7/1 – 7/30	7/31 – 8/29	8/30 – 9/28
YEAR 2	7/31 – 8/29	8/30 – 9/28	7/1 – 7/30
YEAR 3	8/30 – 9/28	7/1 – 7/30	7/31 – 8/29

Rock Creek Isolated #20698 (map #4)

Grazing Administration and Management:

- Change the grazing period in this custodial allotment from 6/15 – 11/30 to 4/15 – 6/30. This allotment will only be grazed for up to thirty days within this new grazing period. There are 14 acres of BLM administered land within this mostly private allotment.
- Monitoring will be implemented along reach # 133, if monitoring shows measurable improvement within three years, the new proposed grazing plan will be continued. If monitoring results don't show improvement with the new proposed grazing plan within three years, a fence will be constructed with a water gap built in. This will eliminate grazing on most of this 0.3 mile stream reach.

Projects:

- A 0.3 mile jack and rail fence will potentially be constructed to enclose reach #133. A hardened water gap would be included to allow a continued water source for livestock.

Simpson Creek FS #30207 (map #9)

Grazing Administration and Management:

- Decrease the number of grazing days in Coyote pasture by 14 days which will add 14 days to the Forest Service Morrison Lake pasture. The Coyote pasture will be grazed up to 25 days two out of three years.
- Grazing rotation will continue as an early, late, rest system. Each pasture is afforded rest every third year.
- Permitted AUMs will stay the same at 135.
- On years when Simpson Creek pasture is grazed, cattle will be herded and pushed out of the north corner of the pasture. If herding efforts are unsuccessful in the Simpson Creek pasture, permittee will be prepared to come off early when Forest Service allowable use levels are met.
- Continue to graze 130 cattle with a grazing period of 7/16 – 9/30
- Allotment boundary and pasture boundaries will be changed to reflect correct placement.

Projects:

- Four wire, approximately 0.2 mile, 3 acre exclosure fence will be constructed around bottom portion of Coyote Creek reach #119
- A riparian pasture will be created around reach #117 by building a 4-wire approximately 1.7 mile fence and 25 acres to enclose the stream. This pasture could be grazed up to two days every third year.

- One mile of temporary polywire fence enclosing approximately 85 acres will be constructed around Crystal Creek reach # 170 if conditions don't improve in the next three years.

Table 7: Proposed Authorized Use in the Simpson Creek FS Allotment, Alternatives B

	COYOTE	SIMPSON CREEK	MORRISON LAKE
YEAR 1	REST	8/25 – 9/28	7/16- 8/24
YEAR 2	7/16 – 8/9	REST	8/10 – 9/23
YEAR 3	8/20 – 9/13	7/16 – 8/19	REST

Fire Management

Wildland fire management within the Big Sheep Creek watershed will be implemented in accordance with the 2006 Dillon RMP as amended. The Big Sheep Creek watershed is classified under fire management Category C within the Dillon RMP as amended. Category C identifies “areas where fire is desired to manage ecosystems, but there are significant constraints that must be considered for its use.” Those constraints may include: loss of livestock forage, wildlife seasonal habitat and migration corridors, sensitive species habitat, and the fragmentation of sagebrush habitat from private land uses.

Non-Commercial Mechanical/Prescribed Fire Treatments

I have decided to implement Alternative C for non-commercial mechanical/prescribed fire treatments identified in the BSCW EA. Treatment unit names, acres, objectives, treatment types, and the affected allotments are listed in table 8. Unit locations and boundaries are shown on Map 11, Appendix A, of the Big Sheep Creek Watershed EA (DOI-BLM-MT-050-2016-0009-EA).

Table 8: Non-Commercial Mechanical/Prescribed Fire Units, Alternative C

Unit Name	Allotment	Acres	Objective(s)	Treatment Type(s)
McNinch 1	Muddy Creek	245	Reduce conifer expansion into sagebrush/grassland	Non-commercial mechanical/Broadcast Rx fire
McNinch 2	Muddy Creek	233		
McNinch 3	Muddy Creek	447		
Johnson	Muddy Creek	166		
Thompson	Muddy Creek	228		
Dixon	Dixon Mountain	315	Improve diversity/composition Reduce conifer expansion	Non-commercial mechanical/Broadcast Rx fire
Little Water	Muddy Creek	667	Improve diversity/composition Reduce conifer expansion	Non-commercial mechanical/Broadcast Rx fire

The overall goal of non-commercial mechanical/prescribed fire treatments is to restore ecological conditions and fuel loadings through the use of prescribed fire and other treatment

methods. Reducing fuels within the wildland interface is a priority, but management actions should also focus on maintaining fire dependent ecosystems and restoring those outside their natural balance through mechanical, chemical and prescribed fire treatments (2006 Dillon RMP as amended).

Conifer expansion treatments utilizing mechanical methods and/or prescribed fire will focus on areas where conifers have most noticeably expanded into sagebrush/grassland compared to historic aerial photographs and field reconnaissance. The primary goal will be to kill/remove 60% or more of conifers less than 30 feet tall. Treatment methods will be a combination of cutting (lop and scatter) and/or prescribed fire. Actual prescribed fire treatment boundaries within the units identified on Appendix A, map 11 of the BSCW EA will be based on topographic features such as ridges and drainages, and man-made features such as trails and roads. When using prescribed fire to reduce conifer expansion into sagebrush habitat, an emphasis will be placed on maintaining 50% or more of the mature sagebrush canopy cover on a drainage (HUC 6) basis. Additional objectives for non-commercial mechanical/prescribed fire treatments for the Dixon Mountain and Little Water Units include returning fire to the landscape as a disturbance agent to improve resiliency and increase seral diversity/composition within the Hidden Pasture Wilderness Study Area (WSA). Treatments identified within wilderness study area boundaries will be confined to mainly broadcast fire with little or no mechanical modification to ensure protection and enhancement of wilderness characteristics. Treatments will occur in early spring or late fall to ensure existing fuels are readily available to support fire spread.

Design Features for Non-Commercial Mechanical/Prescribed Fire

- As per the amended 2006 Dillon Resource Management Plan, use both prescribed fire and mechanical treatments to treat conifer expansion in the non-forested habitat types including expansion in the Wilderness Study Areas where it is determined wilderness values will be enhanced.
- A burn plan will be prepared and approved prior to implementing prescribed fire treatments.
- Treatments within Wilderness Study Area boundaries will be limited to primarily prescribed fire to ensure protection and enhancement of wilderness characteristics.
- One season of rest from livestock grazing may be needed prior to burning to allow sufficient growth of fine fuels (grasses) to ensure a successful burn. At least two growing seasons of rest from livestock grazing will be required following burns to allow re-growth and re-establishment of vegetation in the treated areas.
- Treatment units will be monitored for noxious weeds and cheatgrass, and treated both pre and post treatment. Areas where cheatgrass or noxious weed densities are greater than 50% of vegetative composition and the size of the infestation is larger than five acres will be excluded from the treatment unit.
- Staging areas to complete treatment will be located in areas free of, or treated for, noxious weeds.
- Temporary fencing or hot tape (electric fence) may be used to allow the appropriate rest before or after a prescribed fire treatment.

- Units will be burned as fuel and weather conditions allow. Fire managers will coordinate the timing of prescribed fire treatments (seasonally) and the area treated per year to minimize public resource use conflicts.
- Fire managers and wildlife biologists will coordinate the timing of prescribed fire treatments (seasonally and yearly), and the area treated per year to minimize conflicts with wildlife.
- Treatment will not occur from 6:00 pm to 9:00 am within 2 miles (3.2 km) of sage grouse leks during the lekking season from March 1 – May 15.
- The implementation of prescribed fire treatments will occur over the next ten years.
- Burn units will be surveyed for special status species prior to the burning event and appropriate stipulations will be implemented to mitigate impacts to these species.
- In allotments where prescribed burns occur, grazing AUMs will not be increased. However, livestock grazing distribution may change within the allotment due to increased palatability and availability of forage. No increases in authorized AUMs are proposed in any grazing allotment in the BSCW where a prescribed burn is proposed.
- Off-road vehicles and equipment will be required to be pressure washed to remove weeds and weed seeds prior to starting operations.

Riparian, Wetland and Aquatic Habitat

I have decided to implement all of the projects identified for Wetland Restoration and Streambank Stabilization under Alternative B.

The wetland restoration projects will include the following:

- Up to 100 acres of wetland restoration on Tex Meadow (Riparian Reach #1447, Map 4 BSCW EA) within the Junction Allotment.
- Up to 10 acres of riparian wetland restoration adjacent to Lower Cabin Creek (Riparian Reach #179) within the Junction Creek Allotment.
- Up to 10 acres of wetland restoration on the wet meadow along Nicholia Creek (Riparian Reach #1440, Map 7 BSCW EA) within the Pine Creek Allotment.
- Up to 6 acres of wetland restoration on Island Butte Wetland (Wetland #1460, Map 8 BSCW EA) within the Porcupine Canyon Allotment.

Sites were selected due to extensive hummocking that has led to an alteration in site hydrology and degraded wetland function.

The restoration proposed will include the use of a tracked heavy equipment to physically eliminate the hummocks and restore soil elevations across the wetland complex to more closely resemble pre-disturbance conditions. Site specific design will incorporate features to encourage and improve diversity in wetland vegetative species composition and distribution. This will be accomplished by matching existing topography of the valley, drainage, or meadow and if applicable, slight undulations within portions of the restored wetland area will provide for further variation in duration of saturation. Existing vegetation will not be directly removed but may be partially redistributed as the vegetated hummocks are knocked down or tracked into the inter-hummock channels. The exposure of bare soil will be minimized.

If the wetland area has a defined outlet that has degraded and lost elevation or if the channel within a wetland has degraded, restoration will include action to restore the outlet elevation and/or the channel bed elevation in one or more locations to restore the elevation of the affected water table at the site. This will require the installation of grade control and will require work with a tracked excavator or hand tools.

Ground disturbing activity will occur during driest possible conditions following the growing season (typically between but not limited to August 1 and September 30) and/or in the spring immediately before start of the next growing season, when the ground may be partially frozen (for example but not limited to; February 15 through April 1). This timing will minimize ground disturbance, maximize growth in the first season following disturbance, and provide equipment access to a greater amount of area. Duration of activity at each site will vary on site size but will consist of approximately 4-8 acres per day.

Following restoration, the area restored will be fenced off from the surrounding pasture for a minimum of two growing seasons. Electric fence may be used for this project. This will allow adequate time for the area to vegetate and become a productive, sustainable portion of a grazing rotation again. If after two growing seasons, BLM evaluation of the site indicates that vegetation has not recovered to a level that will meet the BLM's land health standard for riparian and wetland areas, the area will remain segregated and re-evaluated after each growing season thereafter.

The streambank stabilization project will include the following:

Stabilization of approximately 150 feet of streambank on Big Sheep Creek will be completed. The site is located along the access road to the Deadman Gulch Campground approximately 150 feet after leaving the county road (Map 2, Figure 2.1). The streambank proposed for stabilization is on the outside bend of a meander and any further migration of the channel into this eroding bank will likely capture the road, introducing excess sediment and aggregate used for road construction. Currently the edge of water (at base flow) is about 15 feet from the edge of the road at its closest location, with nearly a 1:1 slope from the road to the water (Figure 2.1). This slope is almost completely devoid of vegetation with very little grass and willow at the toe of bank and sage brush at the top (Figure 2.1). The current conditions provide no vegetative buffer between road surface runoff and the active stream channel.



Figure 2.1: Big Sheep Creek looking upstream at the bank to be stabilized.

The bank will be stabilized using a combination of installing rock at the toe of bank and a bioengineering technique utilizing biodegradable woven coconut fiber fabric to encapsulate the existing soil above the rock. The bioengineered portion of the bank will include planted willow cuttings sourced from adjacent riparian areas, native grass seed, and possibly sod mats or willow clumps from the adjacent point bar.

The rock toe will be constructed from either imported angular rock, imported cobble, native cobble that can be collected from the channel, or from a combination of all of the above. Whichever source is deemed appropriate, the size of the material will be large enough to withstand shear stresses at the bank without mobilizing. The intent will be to use a gradation of material that does not deviate by more than approximately 50% from the largest cobbles naturally occurring within this reach of Big Sheep Creek.



Figure 2.2. Conceptual plan view of bank stabilization on Big Sheep Creek along the Deadman Gulch Campground access road.

A tracked hydraulic excavator will be used to complete the project. The excavator will work from both above the bank and from within the channel to install the rock toe and the soil encapsulated fabric lifts. Access to the channel will be from a single location downstream of the site where the bank elevation will allow entry with negligible disturbance to the bank or existing bank vegetation (approximate location shown on Figure 2.2). Only the tracked excavator will utilize this temporary access route therefore the dimensions are estimated at approximately 12 feet wide and 150 feet long. The access will be stabilized and reclaimed as needed immediately upon completion of the instream work. The campground access road surface adjacent to the site will be disturbed during construction but will be repaired upon completion.

The project will take place in the late winter or early spring during low water, while willows are dormant. The duration of the project will depend slightly on the rock source utilized as well as weather but it is estimated to take approximately 6 – 12 days. The access road to the campground will be closed during the implementation of this project.

Recreation and Travel Management

Recreation

Dispersed recreational activities will continue to be managed consistent with other resource management objectives. Special Recreation Permits will continue to be considered on a case-by-case basis with the exception of big game hunting. Outfitted big game hunting will continue to be limited to existing permits and historical use levels. Opportunities for big game hunting, wildlife viewing, horseback riding, and other backcountry recreation will be maintained.

Travel Management and Roads

Travel management will be implemented as prescribed in the Dillon RMP as amended. Roads identified as open to public use will be signed with a white arrow symbol on a sign post. Roads not identified as open to public use will be:

- Left unsigned unless there is evidence of regular use.
- Signed closed if there is evidence of regular use.
- If signing is ineffective at discouraging use, roads will be obliterated to the extent possible (made unnoticeable), at least at the intersection with an open route, or physically closed when continued use is causing unacceptable resource impacts or user conflicts.

In addition to the provisions for travel management provided in the amended 2006 RMP, minor changes will be made to the designated routes to correct mapping errors or achieve consistency with adjacent lands route designations. One of those corrections would add approximately 300 yards of designated open road to allow access to private property within the Johnson Creek drainage where the private landowner has allowed motorized access across that property in the FWP block management program. Without the designation of this route on BLM lands, it would be illegal for the public to access this route across those private lands. Although this route was not identified as a designated open motorized route on the original map in the EA, it is the same route that was identified to have a culvert installed to reduce sedimentation to the creek caused by vehicles crossing the creek on this route. Therefore, officially designating this route as open to public motorized vehicle use will not adversely impact the resources, but will coincide with the adjacent landowner's management and correct an oversight in the official route designation. BLM will also work with adjoining landowners, especially within the Muddy Creek area to improve compliance with existing travel management regulations.

Specifically, BLM will

- Install hiker and horse-accessible gates at key locations to allow hiking and horseback travel while restricting motorized travel on routes closed to motorized use.
- Install an informational kiosk at key access locations.
- Obliterate or reclaim approximately 1-2 miles of user-created routes by scarifying the route surface and planting live and placing dead brush within the linear disturbance to obscure the visual presence of the route from the adjoining route junction.
- Barricade or obstruct access to closed routes that have been habitually traveled and/or routes that have been physically obliterated.

Stream Crossings

Stream crossings currently identified for improvement are shown below:

- Indian Creek Allotment - Install a culvert on road crossing on Indian Creek (Riparian Reach #127; Map 3)
- Muddy Creek Allotment - Improve all road crossings on Muddy Creek
- Pine Creek Allotment - Install a culvert at the upstream end of Deadman Creek (Riparian Reach #123; Map 7) and remove culvert on the downstream end of Pine Creek (Reach #126, Map 7) just upstream of its confluence with Deadman Creek.
- Porcupine Canyon Allotment - Remove old dysfunctional culvert at the bottom of Island Butte Spring (Reach #746) and install culvert on the road crossing over Porcupine Creek (between Reach #159 and Reach #161, Map 8).

Stream crossing improvements are not limited to these sites but these and all stream crossings projects will adhere to the following guidelines:

- Install culverts appropriately sized for fish passage on stream crossings on all open routes that cross the main stem of Muddy Creek.
- All applicable State and Federal Permits will be obtained and all permit conditions will be followed for construction of stream crossings.
- Implementation of stream crossing improvements will take place during low flow conditions.
- The most appropriate stream crossings, e.g. culverts or hardened crossings will be selected based on site specific conditions and impacts: floodplain fill, economics, road safety as well as long term impacts to stream channel function (e.g.; scour/deposition) and vegetation.
- Temporary and/or permanent culverts placed under roads will be adequately sized to maintain stream dimensions, patterns and profiles.
- Hardened crossings will be constructed to match the approximate dimensions and profile of the channel upstream and downstream.

Noxious and Invasive Species

Management of noxious weeds will continue in cooperation with Beaverhead County, federal and state agencies, private landowners and other partners. All invasive species on the Montana noxious weed list will be treated on a prioritized basis to the degree financial resources allow. Any new noxious weed infestations will be targeted for prompt eradication before they have a chance to get well established. When a biological control becomes available for houndstongue it will be considered for release on infestations within the watershed.

An average of 25 acres in the Big Sheep Creek Watershed will be treated with herbicides annually, pending funding. Roads, trails and washes as well as areas where private landowners actively cooperate, participate, and support the BLM's weed management strategies, will be given a higher priority for treatment.

Three herbicides that have been analyzed in the "Vegetation Treatments Using Aminopyralid, Fluroxypyr, and Rimsulfuron on BLM Lands in 17 Western States" Programmatic EIS will be

used, where appropriate. All applicable Standard Operating Procedures and Best Management Practices discussed in the EIS will be followed.

The BLM will work with other federal, state and county agencies, both in Montana and Idaho, as well as other interested organizations and landowners to form a collaborative where noxious weed inventory data will be shared. This will allow for everyone on both sides of the Montana – Idaho border to know what threats may be headed their way. Cooperative treatment days may be held in any area that is of concern to the parties involved.

Special Status Species

Activities that disturb mineral soil (such as blading, plowing, ripping, etc.) may not be allowed within the boundaries of populations of special status plant species. In habitats likely to support rare plants, field inspections will be conducted to search for special status plant species prior to authorizing surface disturbing activities. If rare plants are found in the course of the botanical survey, adverse impacts will be mitigated through project redesign or abandonment.

The BLM, in cooperation with other agencies and partners, will continue to monitor sage grouse leks. In areas where sage grouse use may be more concentrated, such as within ¼ mile of leks or wintering areas, depending on topography, vegetation, visibility, etc., fences will be marked so they are more visible and collision with wires is reduced (USDA, 2012). Seasonal habitat objectives from the BLM’s Idaho and Southwestern Montana Greater Sage-Grouse Approved RMP Amendment will be incorporated including maintenance of existing habitat so that 80% or more of big sagebrush communities provide vegetative composition and structure for sage grouse nesting/early brood rearing, >40% sagebrush habitat meets summer/late brood habitat characteristics, and >80% meets winter habitat characteristics where appropriate (relative to ecological site, etc.), an average of 7 inches herbaceous understory within site potential within sage grouse nesting/early brood rearing habitat, and composition of highly nutritious forbs (e.g. composites and legumes) in sage grouse nesting/early brood rearing habitat will be maintained or increased (USDI, 2015a). As stated in the RMP Amendment (page 2-4): *“These habitat objectives are not obtainable on every acre within the designated GRSG habitat management areas. Therefore, the determination on whether the objectives have been met will be based on the specific site’s ecological ability to meet the desired condition identified in the table”*.

West Nile Virus (WNV) has been linked to sage grouse mortality in multiple areas. WNV has not been documented on BLM lands within the DFO, nor in sage grouse in Beaverhead County. Appendix C in the Idaho and Southwestern Montana Greater Sage-Grouse Approved RMP Amendment provides guidance for West Nile Virus. Management to reduce impacts of WNV focuses on eliminating man-made water sources that support breeding mosquitoes known to vector the virus. Whether the water development is for livestock water, wildlife habitat, fish, or storm water management, potential habitat for mosquitoes may be increased. Incorporating applicable design and mitigation measures in water development projects can reduce mosquito production through modifying and eliminating mosquito breeding sites.

The BLM will continue to work with other agencies and partners in the management of WCT within the Big Sheep Creek Watershed.

Projects:

- Continue stream temperature monitoring of WCT streams on a 5 year basis.
- Continue WCT population monitoring on 5-10 year basis
- Coordinate with MT fish wildlife and parks on the design for the construction of a fish passage barrier in the lower reaches of Meadow Creek to preserve the genetic integrity of this population.
- Replace the Muddy Creek fish barrier either at the existing location or a short distance downstream if a suitable location can be located.
- Continue monitoring of the four sensitive plant species within the BSCW.

See *Forest and Woodland Treatments* section below for continued 5-needle pine treatments.

Wilderness

The Hidden Pasture Creek Wilderness Study Area will continue to be managed in accordance with BLM Manual 6330, “*Management of BLM Wilderness Study Areas*” until such time as Congress either designates the area as wilderness or releases it for more traditional multiple use management. Management in accordance with the current policy requires that the wilderness conditions that existed at the time of the inventory in 1979 be unimpaired until such time as Congress can make that determination, no matter how long that may take. Should the area be released from further consideration by Congress, it will be managed in accordance with Appendix Q of the Dillon RMP, as amended, to emphasize semi-primitive non-motorized recreation opportunities.

Cultural and Paleontological Resources

As required by Section 106 of the National Historic Preservation Act, a Class III cultural resource inventory is required prior to the implementation of any proposed range or habitat improvement project. Should significant cultural resources be identified, impacts will be mitigated through project abandonment or redesign. Care will be taken to avoid and protect significant cultural resources and any standing structures (should they be present) during the course of any proposed project. As required by the Paleontological Resources Preservation Act, a paleontological inventory is required in areas with a high potential for paleontological resources prior to the implementation of any proposed range or habitat improvement projects. Should paleontological resources be identified, impacts will be mitigated through project abandonment or redesign. In addition, personnel from the BLM should be notified of the presence and location of any cultural or paleontological resources encountered by contractors or permittees during the course of operations on public lands.

Forest and Woodland Treatments

Personal use firewood permits and Christmas tree permits will continue to be issued. The following will also continue for 5-Needle Pine Treatments:

- Cones will be collected on whitebark and/or limber pine trees suspected to be resistant to white pine blister rust and will be sent for testing to determine their resistance level and/or stored for future planting.

- Pheromones (e.g., verbenone) will be applied to selected trees to protect them from attack by mountain pine beetle. (Refer to Pheromone Use in the Dillon Field Office EA #DOI-BLM-B050-2011-007-EA).
- Additional cones will be collected as funding and cone crops allow. This seed may be sent to the national seed bank and genetic restoration program and/or incorporated into an office-wide operational collection that has been banked for future management efforts.

Planting of whitebark and/or limber pine seeds or seedlings may be completed on a case-by-case basis in suitable habitats including, but not limited to:

- Areas burned by wildfire, areas that have experienced extensive over-story mortality from mountain pine beetle and/or white pine blister rust, areas with low age class diversity, or where natural regeneration is not occurring within existing five needle pine habitat.
- Competing conifers (non 5-needle pine species) may be cut within the immediate vicinity of healthy whitebark and/or limber pine trees to reduce the likelihood of being damaged in the event of a wildfire.
- Where natural whitebark pine regeneration is establishing, dead trees may be hand felled to protect against trampling (wildlife and/or livestock) in areas of concern. This will be isolated to small areas less than one acre in size and within areas that protection of the regeneration is a high priority (i.e. where mature tree mortality from MPB is high).

Monitoring

Under all alternatives, resource monitoring will be completed to measure progress toward meeting site-specific as well as watershed level and land use plan level objectives. Monitoring will be done according to the monitoring plan shown as Appendix B to the BSCW EA.

Rationale for Decision

My decision is based on the Big Sheep Creek Watershed Assessment Report, the Big Sheep Creek Watershed EA (DOI-BLM-MT-B050-2016-0009-EA), detailed reports and site-specific monitoring and assessments in the related allotment and monitoring files, first-hand knowledge of my staff and I, meetings with public stakeholders and careful review and consideration of public comments. I have reviewed the alternatives analyzed in detail to determine if they were responsive to the purpose and need for this proposal and the issues relevant to it. I also reviewed the alternatives that were considered but not analyzed in detail to help me decide if the analysis had considered a reasonable range of alternatives. I find that the alternatives considered address the key issues and provide a reasonable range to consider.

It is necessary to change livestock management on five allotments within the Big Sheep Creek Watershed to be consistent with BLM's Standards and Guidelines for Rangeland Health and to ensure progress is made toward achieving the objectives of the proposed action. Implementing the management strategies as detailed above authorizes sustainable use of public lands while making measurable progress toward meeting the land health standards and site-specific resource objectives identified for BLM-administered lands within the Big Sheep Creek Watershed. The BLM's analysis shows that the management plans described above will allow progress towards

meeting the resource management goals and objectives identified for the five grazing allotments, as well as initiating significant progress toward meeting the Land Health Standards (43 CFR 4180) where concerns were identified. Progress will be determined by continuing trend monitoring as well as implementing AIM monitoring within the Big Sheep Creek Watershed.

The livestock management strategies I have selected include shorter grazing periods, additional rest, reduced active AUMs, construction of range improvement projects, such as riparian pastures or exclosures, and/or identified thresholds and responses which are anticipated to enhance herbaceous plant vigor, production, and residual cover on BLM-administered lands within the watershed. This is expected to maintain or improve suitable sagebrush habitat conditions for sagebrush obligate species, and enhance habitat for big game and many other wildlife species. Functional-at risk riparian and wetland habitats are expected to trend toward proper functioning condition under these livestock management strategies. Increased vegetative cover in the uplands and improving riparian areas will result in reduced sediment input in streams thereby improving water quality on a localized scale.

I have determined that all grazing permittees/lessees currently permitted on the BSCW allotments have satisfactory records of performance and are in substantial compliance with the terms and conditions of their existing Federal grazing permits that are being renewed with this decision.

Non-commercial mechanical/prescribed fire treatments will focus on increasing seral/age class diversity, reducing conifer expansion into sagebrush/grasslands, and promoting aspen regeneration. Re-introducing fire as a natural disturbance agent through the use of prescribed fire will result in a mosaic of plant communities and diversity of successional stages in all habitat types where treatments occur. This will increase a decision maker's ability to allow wildfire as a natural disturbance in the future. Treatments to reduce conifer expansion into mountain big sagebrush and three tip sagebrush will result in short-term change within sagebrush habitat, converting these sagebrush/forested areas to early seral stage sagebrush habitat with a grassland aspect and a minor forest canopy. Recovery of sagebrush habitat will facilitate the BLM's goals and objectives of maintaining and improving sagebrush/grassland habitat. Based on past prescribed fires in the watershed, it will take 15-30 years to move through early and mid seral stages to get back to current sagebrush cover, seral and structural diversity within treated sagebrush habitats. By creating a mosaic of age classes in the sagebrush canopy, more edge is created. Removing the conifer expansion will increase the seral and structural diversity of the sagebrush steppe habitat.

In addition, the proposed actions are expected to result in habitat that is more resilient to unforeseen events, such as drought, wildfire and climate change.

The wetland restoration projects will improve wetland function by restoring the hydrologic regime and improving the quantity and quality of wetland vegetation. Currently the inter-hummock channels act as flow paths that can drain the wetland area prematurely. These inter-hummock channels also lack vegetation. Similarly, if a wetland area has a defined channel flowing through that has been degraded and vertically disconnected from the adjacent wetland;

the wetland area may drain prematurely. By physically eliminating the inter-hummocks channels and adding grade control in adjacent channels, the amount of vegetated wetland area should increase and the area as a whole may hold water for longer periods of time.

The streambank restoration project along Big Sheep Creek will restore a vegetative buffer between the road and the stream reducing the amount of sediment input from the road surface. Stabilizing this bank will also reduce the likelihood of the stream capturing this section of the road in the future. Overall this project will reduce sediment input to Big Sheep Creek thereby reduce sediment aggradation and deposition downstream in the long term.

Sediment inputs into streams will decrease as a result of implementing the actions outlined in the BSCW EA. Travel management revisions, livestock grazing revisions and riparian, wetland and aquatic habitat projects will all contribute to a reduction in sedimentation.

Westslope cutthroat trout habitat on BLM lands will be improved over the long term by implementing this plan, specifically by working on an interagency basis to install, relocate and/or maintain fish barriers on Muddy Creek and the lower reaches of Meadow Creek. WCT spawning success is expected to increase due to changing the timing of livestock use within the Indian Creek Allotment.

Changing livestock grazing management to improve upland and riparian/wetland health, marking fences in areas with a high collision risk, removing/modifying fences, and other conservation actions identified in the BSCW EA are intended to reduce wildlife, including sage grouse, mortality and improve habitat. Continuing to coordinate with other agencies and volunteers to complete sage grouse lek counts will contribute to long-term population trend data for male sage grouse lek attendance. Implementing seasonal habitat objectives from the BLM's Idaho and Southwestern Montana Greater Sage-Grouse Approved RMP Amendment will maintain and enhance vegetative composition and structure for sage grouse and sagebrush obligate species throughout the year, including maintaining or increasing big sagebrush communities, sagebrush canopy cover, herbaceous height, and forb diversity. Incorporating the goals, objectives, land use allocations, management actions, required design features, and monitoring established in the RMP Amendment will help protect sage grouse and its habitat on BLM administered lands within BSCW.

Sage grouse incur population-level impacts at a very low level of conifer expansion, as no leks were active in areas where conifer canopy cover exceeded 4% (Baruch-Mordo et al. (2013). This study also found that sage grouse have a negative response to areas of active conifer expansion in addition to areas with more established stands. These results align with other studies' findings of sage grouse avoidance of conifer habitats during all stages of life (i.e. nesting, brood-rearing, and wintering) (Doherty et al., 2008, Atamian et al., 2010, Casazza et al., 2011). Since the non-commercial mechanical/prescribed fire units are being treated for conifer expansion and are unsuitable sage grouse habitat, hens are unlikely to use these areas for nesting and brood-rearing in their current condition. Due to the conifer expansion creating unsuitable habitat and deterring sage grouse from using the treatment units, disturbance to sage grouse within these units is unlikely. While individuals and habitat may be impacted, treatment would

not contribute to a trend towards federal listing or cause a loss of viability to the population or species. Overall, utilizing mechanical/prescribed fire treatments would transition this habitat that is currently unsuitable for sage grouse into more suitable seasonal sage grouse habitat. Without treatment this would transition into forested habitat and not be suitable for sage grouse again in the foreseeable future. See pages 117-121 in the BSCW EA for additional discussion about sage grouse habitat and mechanical/prescribed fire treatments.

Habitat for three sensitive plant species will be maintained within the watershed.

Protecting individual whitebark and limber pine trees, and collecting cones from these trees will contribute to the genetic breeding program, and could help the long-term sustenance of these species on the landscape. Improving whitebark and limber pine will promote habitat and encourage this food source for wildlife species, such as red squirrels, Clark's nutcrackers, and bears.

Prevention, detection, treatment and monitoring of noxious weeds will continue or be intensified in the BSCW to maintain/increase biodiversity. Aggressive treatment of all noxious and invasive species will result in meeting the objectives for weed management outlined in the BSCW Watershed EA. These objectives include; containment, control and/or eradication of existing infestations of noxious weeds using Integrated Weed Management methods, preventing establishment of new infestations, and preventing or minimizing the spread of cheatgrass. The design features identified for the noncommercial mechanical/prescribed fire treatments, the riparian, wetland and aquatic habitat projects and any new structural projects will mitigate the spread of noxious and invasive species as a result of these projects. Use of new herbicides will increase effectiveness of treatments while reducing injury to non-target vegetation.

The proposed travel management changes in the Muddy Creek drainage will correct mapping errors and refine decisions to better reflect the wheeled motorized vehicle use in this area as well as reducing resource impacts and social conflicts resulting from unauthorized OHV use in this area.

The decisions meet the non-impairment criteria for Wilderness Study Areas and are expected to maintain or improve wilderness characteristics within the Hidden Pasture WSA.

The decisions outlined above are not expected to have an overall negative impact on socio-economics of the local community or high impacts to any individual or group of public land users.

The plan outlined in this decision is in conformance with Dillon RMP as amended by the Idaho and Southwestern Montana Greater Sage-Grouse Approved RMP Amendment. These plans have been reviewed to determine if the Proposed Action conforms with the land use plan terms and conditions as required by 43 CFR 1610.5. The proposed decision is also in conformance with the Federal Land Policy and Management Act, the Taylor Grazing Act, the Standards for Rangeland Health and Guidelines for Grazing Management (43 CFR 4180) and with BLM policies and Federal regulations.

The proposed action was developed while considering the goals, objectives and management recommendations in the Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout in Montana, the BLM's National Sage-grouse Strategy and the Management Plan and Conservation Strategies for Sage Grouse in Montana.

In response to the BLM's request for comments, questions, and concerns on the Big Sheep Creek Watershed EA (DOI-BLM-MT-050-2016-0009-EA), several individuals or organizations submitted comments. I have considered their comments prior to making the proposed decision outlined above. The BLM welcomes and appreciates the input and interest expressed in the management of the public's land.

Authority

The authority under which this decision is contained in Title 43 of the Code of Federal Regulations. The Land Use Plan and Rangeland Management program authority is found in 43 CFR 4100, the Forest Management Program authority is found in 43 CFR 5003. Pertinent authorities for administrative remedies are stated below.

4160.1(a) **Proposed Decisions** - Proposed decisions shall be served on any affected applicant, permittee, or lessee and any agent and lien holder of record, who is affected by the proposed actions, terms or conditions, or modification relating to applications, permits, and agreements (including range improvement permits) or leases, by certified mail or personal delivery. Copies of proposed decisions shall also be sent to the interested public.

4160.2 **Protests** - Any applicant, permittee, lessee, or other affected interests may protest the proposed decisions under Sec. 4160.1 of this title in person or in writing to the authorized officer within 15 days after receipt of such decision.

4160.3 Final decisions

(a) In the absence of a protest, the proposed decision will become the final decision of the authorized officer without further notice unless otherwise provided in the proposed decision.

(b) Upon the timely filing of a protest, the authorized officer shall reconsider her proposed decision in light of the protestant's statement of reasons for protest and in light of other information pertinent to the case. At the conclusion to her review of the protest, the authorized officer shall serve her final decision on the protestant or her agent, or both, and the interested public.

(c) A period of 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final as provided in paragraph (a) of this section, is provided for filing an appeal and petition for stay of the decision pending final determination on appeal. A decision will not be effective during the 30-day appeal period, except as provided in paragraph (f) of this section. See 4.21 and 4.470 of this title for general provisions of the appeal and stay process.

4160.4 **Appeals** - Any person whose interest is adversely affected by a final decision of the authorized officer may appeal the decision for the purpose of a hearing before an administrative

law judge by following the requirements set out in 4.470 of this title. As stated in that part, the appeal must be filed within 30 days after the receipt of the decision or within 30 days after the date the proposed decision becomes final as provided in 4160.3(a). Appeals and petitions for a stay of the decision shall be filed at the office of the authorized officer. The authorized officer shall promptly transmit the appeal and petition for stay and the accompanying administrative record to ensure their timely arrival at the appropriate Office of Hearings and Appeals.

Provisions for Protest and Appeal

Protests

Actions described in this Decision may be protested by any applicant, permittee, lessee, or other interested public. Protests must be filed in this office within 15 days of the effective date of this Decision in accordance with 43 CFR 4160.1.

For recipients not receiving this proposed decision via certified mail, the protest period for this proposed decision will end on **October 20, 2016**.

Protests may be received in person or in writing to:

Pat Fosse
Acting Field Manager
1005 Selway Drive
Dillon, Montana 59725

The protest, if filed, should clearly and concisely state the reason(s) as to why the Proposed Decision is in error.

In the absence of a protest, the Proposed Decision will become my final decision.

Appeals

Any applicant, permittee, lessee, or other person whose interest is adversely affected by the final decision may file an appeal and petition for stay of the decision pending final determination on appeal under 43 CFR 4160.4, '4.21, and '4.470. The appeal and petition for stay must be filed in writing within 30 days following receipt of the final decision. The appeal, or the appeal and petition for stay, must be in writing and delivered in person, via the United States Postal Service mail system, or other common carrier, to the Dillon Field Office as noted above. The BLM does not accept appeals by facsimile or email.

The appeal shall state the reason(s), clearly and concisely, why the appellant thinks the final decision is in error.

Should you wish to file a motion for stay, the appellant shall show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied.
- (2) The likelihood of the appellant's success on the merits.
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

As noted above, the petition for stay must be filed in the office of the authorized officer.

Within 15 days of filing the appeal, or the appeal and petition for stay, with the BLM officer named above, the appellant must serve copies to any other person named in this decision and to the Office of the Solicitor located at the U.S. Department of the Interior, Office of the Solicitor, 2021 4th Avenue North, Suite 112, Billings, MT 59101 in accordance with 43 CFR 4.70 (a) and 4.471(b).

Any person named in the decision from which an appeal is taken (other than the appellant), who wishes to file a response to the petition for a stay, may file with the Office of Hearings and Appeals a motion to intervene in the appeal, together with the response, within 10 days after receiving the petition. The address for the Office of Hearings and Appeals is:

Office of Hearings and Appeals
Department Hearings Division
405 South Main Street, Suite 400
Salt Lake City, Utah 84111

Within 15 days after filing, the person must serve copies on the appellant, the Office of the Solicitor, and any other person named in the decision (43 CFR 4.472(b)).

Dillon Field Manager

Date

Attachment: List of Recipients

Big Sheep Creek Ranch
c/o Russ Dunn
P.O. Box 1105
Bozeman, Montana 59771

Bryan Mussard
6101 Sweetwater Road
Dillon, Montana 59725

Gordon & Gladys Martinell
P.O. Box 89
Dell, Montana 59724

James & Susan O'neill
P.O. Box 467
Bozeman, Montana 59771

Mona Welborn
2550 Lakefront Drive
Dillon, Montana 59725

Nettie Welborn
245 Clarks Lookout
Dillon, Montana 59725

Jeff Welborn
P.O. Box 790
Dillon, Montana 59725

Chad & Heather Hansen
P.O. Box 78
Dell, Montana 59725

Big Sheep Creek Ranch
c/o Russ Dunn
P.O. Box 1105
Bozeman, Montana 59771

Beaverhead County Commissioners
2 S Pacific Street, Cl #4
Dillon, Montana 59725

Roger & Carrie Ann Peters
6000 Highway 324
Dillon, Montana 59725

Ross Hansen Ranch
c/o Ross Hansen
P.O. Box 48
Dell, Montana 59724

Smith's Elk Meadows Ranch
c/o Bryan Smith
P.O. Box 766
Rigby, Idaho 83442

Troy & Joy Smith
550 Cedar Hills Road
Whitehall, Montana 59759

Victoria Zoellner
c/o Tim Clark
P.O. Box 25
Dell, Montana 59724

William & Kris Martinell
P.O. Box 50
Dell, Montana 59724

George Hurst
P.O. Box 32
Lima, Montana 59739

Roger & Carrie Ann Peters
6000 Highway 324
Dillon, Montana 59725

Montana DNRC
Dillon Unit
840 N Montana
Dillon, Montana 59725

Shoshone-Bannock Tribes
Christine Cutler
Environmental Program Manager
P.O. Box 306
Fort Hall, Idaho 83203

Shoshone-Bannock Tribes
Carolyn Smith-Cultural Resource Coordinator
P.O. Box 306
Fort Hall, Idaho 83202

Shoshone-Bannock Tribes
Chairman, Fort Hall Business Council
P.O. Box 306
Fort Hall, Idaho 83202

Shoshone-Bannock Tribes
Darrell Shay-Language & Cultural Preservation
P.O. Box 306
Fort Hall, Idaho 83202
Blackfeet Tribal Council
Chairman-Business Council
P.O. Box 850
Browning, Montana 59417

Blackfeet Tribal Council
John Murray, THPO
P.O. Box 850
Browning, Montana 59417

Confederated Salish-Kootenai Tribes
Kathryn McDonald, THPO
P.O. Box 278
Pablo, Montana 59855

Confederated Salish-Kootenai Tribes
Vernon Finley, Chairman
P.O. Box 278
Pablo, Montana 59855

Montana Dept of Fish Wildlife & Parks
Craig Fager
730 N Montana
Dillon, Montana 59725

Montana Dept of Fish Wildlife & Parks
Matt Jaeger
730 N Montana
Dillon, Montana 59725

Montana DEQ
Bonnie Lovelace, Regulatory Affairs Mgr
Directors Office
P.O. Box 200901
Helena, Montana 59620-0901

USDA Sheep Experiment Station
19 Office Loop
Dubois, Idaho 83423

USDA FS Beaverhead-Deerlodge NF
Forest Supervisor
420 Barrett
Dillon, Montana 59725

USDA FS Beaverhead-Deerlodge NF
Dillon Ranger District
District Ranger
420 Barrett
Dillon, Montana 59725

USDA NRCS
Dillon Field Office
420 Barrett Street
Dillon, Montana 59725

USDI BLM Montana/Dakota State Office
Montana-924
5001 Southgate Dr
Billings, Montana 59101-4669

USDI Fish & Wildlife Service
Red Rock Lakes NWR
27650b S Valley Road
Lima, Montana 59739-9742

The Nature Conservancy
Nathan Korb
32 S Ewing
Helena, Montana 59601

Alliance for the Wild Rockies
Michael T Garrity
P.O. Box 505
Helena, Montana 59624

Native Ecosystem Council
Sara Jane Johnson
P.O. Box 125
Willow Creek, Montana 59760

Western Watersheds Project
Josh Osher, Montana Director
Public Policy Consultant
127 W Main Street
Hamilton, Montana 59840